

REMARKS

Reconsideration of the present application is respectfully requested. Claims 1-38 were previously pending, with claims 1, 12, 21, and 32 being independent. Claims 1, 12, 15, 18, 21, and 22 are herein amended, claims 8 and 14 have been canceled. Therefore claims 1-7, 9-13, and 15-38 are currently pending with claims 1, 12, 18, 21, 22, and 32 being independent.

In the Office Action mailed July 14, 2006, claims 1, 3-6, 8, 10-15, and 17 were rejected under 35 U.S.C. § 102(e) as being anticipated by Galloway et al., U.S. Patent No. 6,899,186 (hereinafter the "'186 patent"). Claims 1, 2, 21, and 28-31 were rejected under 35 U.S.C. §102(e) as being anticipated by Galloway et al., U.S. Patent No. 6,857,487 (hereinafter the "'487 patent"). Claims 7 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Galloway et al. in view of U.S. Patent Publication 2004/0226751 to McKay et al. Claims 32-38 were allowed and claims 9, 16, 18, 19, and 22-27 were objected to, but would be allowable if rewritten in independent form.

Applicants have amended claim 1 by inserting the limitation of claim 8, namely that the drilling shoe is biased towards the rotatable configuration. Claim 8 has been canceled. During the discussion of claim 8 in the Office Action, the Examiner states that the '186 patent teaches that pin 310 biases the drilling shoe toward the rotatable configuration. Applicants respectfully disagree and submit that pins 310 actually bias the drilling shoe toward the locked configuration.

In the discussion of claims 1 and 3, the Examiner notes that the drilling shoe of the '186 patent is shiftable between a rotatable configuration and a locked configuration. According to the Examiner, the shoe of the '186 patent is in the locked configuration when the shear pins 310 are intact and in the rotatable configuration when the shear pins break. Pins 310 are initially intact in the drilling shoe of the '186 patent. Thus, pins 310 bias the drilling shoe toward the locked configuration. It is the bias of the intact pins that is overcome by the application of an axial force thereby causing pins 310 to break and shifting the shoe to the rotatable configuration. If the shoe were biased towards the rotatable configuration (pins broken), the drilling shoe would be inoperable. Further, it is not possible for the drilling shoe

taught by the '186 patent to be shiftable between the rotatable configuration and a locked configuration, such would require the broken pins to somehow "un-break" and return to their intact state once again.

Claim 8 was not rejected under the '487 patent in this Office Action. Therefore, Applicants have demonstrated that the '186 patent does not teach biasing of the drilling shoe toward the rotatable configuration and respectfully submit that amended claim 1, and dependent claims 2-7 and 9-11 are in condition for allowance.

Applicants have amended independent claim 12 by inserting the limitations of claim 14 and the limitation that the interlockable teeth are biased apart during rotation of the shoe relative to the casing. Applicants submit that the '186 patent does not teach that the teeth are biased apart during rotation of the shoe relative to the casing. As the Examiner notes, the "teeth" of '186 patent are a set of splines. The splines are an alternative means of transmitting torsional force (i.e., rotational force) between the string of casing and the collapsible apparatus. Thus, in order for the drilling shoe to rotate, the splines must be engaged. Claim 12 requires that the sets of teeth be biased apart, or disengaged, during rotation of the shoe. This is entirely opposite to the teachings of the '186 patent. Further, the '186 patent is entirely silent about "biasing" of the splines toward engagement or disengagement. However, if the shoe is in the midst of drilling operations, the splines would be engaged so as to provide the necessary torsional force to the drill bit. Applicants submit that amended claim 12, and dependent claims 13, 15-17, and 20 are in condition for allowance.

The Examiner indicated that dependent claim 18 would be allowable if rewritten in independent form to include all limitations of base and intervening claims. Applicants have redrafted claim 18 in independent form by inserting the limitations of previous claim 12 and original claim 17. Thus, claim 18 and dependent claim 19 are now in condition for allowance.

Independent claim 21, rejected only under the '487 patent, has been amended to recite that step (c) occurs after drilling of the wellbore to the desired depth. In the action, the Examiner refers to Fig. 2 as teaching the step of locking the drilling shoe to inhibit relative rotation between the casing section and the rotatable portion and notes that a specific order for

performing the steps of the claimed method has not been established, therefore the reference only needs to disclose the claimed steps regardless of order. Applicants submit that the present amendment to claim 21 establishes an ordering of steps, (step (a) must inherently occur prior to step (b) and (c) otherwise no drilling could occur). The '487 patent does not teach locking of a drilling shoe *after drilling the wellbore to the desired depth* as presently claimed. In fact, any "locking" step of the '487 patent must be performed prior to commencing drilling operations as the drilling system 9 is initially provided as three concentric casing strings connected to one another. Under no interpretation, does the '487 patent teach the presently claimed method. Claim 21 along with dependent claims 28-31 now stand in condition for allowance.

The Examiner indicated that dependent claim 22 would be allowable if rewritten in independent form to include all limitations of base and intervening claims. Applicants have redrafted claim 22 in independent form by inserting the limitations of previous claim 21. Thus, claim 22 and dependent claims 23-27 are now in condition for allowance.

Claims 32-38 were indicated by the Examiner as being allowed. These claims remain as previously submitted.

Application No. 10/799,790
Amendment dated October 5, 2006
Reply to Office Action of July 14, 2006

In view of the foregoing amendments, the present application should now be in condition for allowance and such allowance is respectfully requested. Should the Examiner have any questions, please contact the undersigned at (800) 445-3460.

Please deduct the amount of \$400.00 from Deposit Account No. 19-0522 for the 2 additional independent claims. The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 19-0522.

Respectfully submitted,

HOVEY WILLIAMS LLP

By:

A handwritten signature in black ink, appearing to read "Kameron D. Kelly", is written over a horizontal line.

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